

WHAT IS CLAIMED IS:

1. An imaging element for an electronic endoscope, comprising:
a base;

an image sensor mounted on the base, the imaging sensor having a light-receiving surface and an effective imaging region; and
a predetermined circuit mounted on the base for taking out a signal from the image sensor,

wherein the predetermined circuit is arranged along the periphery of the light-receiving surface of the image sensor on the base so that a center of the base on the light-receiving surface of the image sensor is substantially aligned with a center of the effective imaging region of the image sensor.

2. The imaging element as claimed in claim 1, wherein the base has an outer profile of a substantially rectangular shape, and the effective imaging region is also formed into a substantially rectangular shape, in which the effective imaging region is arranged with respect to the base so that one side of the effective imaging region is substantially in parallel with the corresponding side of the base.

3. The imaging element as claimed in Claim 2, wherein the predetermined circuit includes a signal processing circuit for carrying out signal processing of a signal outputted from the image

sensor, and a control circuit for carrying out timing control to extract a signal from the image sensor.

4. The imaging element as claimed in Claim 3, wherein the signal processing circuit includes an A/D converter which converts an analog signal from the image sensor into a digital signal.

5. The imaging element as claimed in Claim 4, wherein the signal processing circuit includes a circuit which generates a video signal.

6. The electronic endoscope as claimed in Claim 3, wherein the signal processing circuit includes an A/D converter which converts an analog signal from the image sensor into a digital signal, a circuit which generates a digital video signal based on the signal from the A/D converter, and a D/A converter which converts the digital signal from the generation circuit into an analog signal.

7. The electronic endoscope as claimed in Claim 3, wherein the image sensor is a CMOS sensor, and the control circuit has a circuit which specifies an address of a horizontal scanning direction of the image sensor and a circuit which specifies an address of a vertical scanning direction of the image sensor.

8. The electronic endoscope as claimed in Claim 3, wherein the signal processing circuit is arranged in a substantially L-shaped

area along with two continuous sides of the base, and the control circuit is arranged in a substantially L-shaped area along with the other two continuous sides of the base.

9. An electronic endoscope, comprising:

an elongated flexible endoscope main body having a tip portion, the tip portion of the main body being adapted to be inserted into an object to be observed; and

an imaging element provided in the tip part of the main body for taking an image of a part to be observed of the object, the imaging element comprising a base; an image sensor mounted on the base, the imaging sensor having a light-receiving surface and an effective imaging region; and a predetermined circuit mounted on the base for taking out a signal from the image sensor, wherein the predetermined circuit is arranged along the periphery of the light-receiving surface of the image sensor so that a center of the base on the light-receiving surface of the image sensor is substantially aligned with a center of the effective imaging region of the image sensor.

10. The electronic endoscope as claimed in claim 9, wherein the base has an outer profile of a substantially rectangular shape, and the effective imaging region is also formed into a substantially rectangular shape, in which the effective imaging region is arranged with respect to the base so that one side of the effective imaging

region is substantially in parallel with the corresponding side of the base.

11. The electronic endoscope as claimed in Claim 10, wherein the predetermined circuit includes a signal processing circuit for carrying out signal processing of a signal outputted from the image sensor, and a control circuit for carrying out timing control to extract a signal from the image sensor.

12. The electronic endoscope as claimed in Claim 11, wherein the signal processing circuit includes an A/D converter which converts an analog signal from the image sensor into a digital signal.

13. The electronic endoscope as claimed in Claim 12, wherein the signal processing circuit further includes a circuit which generates a video signal.

14. The electronic endoscope as claimed in Claim 11, wherein the signal processing circuit includes an A/D converter which converts an analog signal from the image sensor into a digital signal, a circuit which generates a digital video signal based on the signal from the A/D converter, and a D/A converter which converts the digital signal from the generation circuit into an analog signal.

15. The electronic endoscope as claimed in Claim 11, wherein the

image sensor is a CMOS sensor, and the control circuit has a circuit which specifies an address of a horizontal scanning direction of the image sensor and a circuit which specifies an address of a vertical scanning direction of the image sensor.

16. The electronic endoscope as claimed in Claim 11, wherein the signal processing circuit is arranged in a substantially L-shaped area along with two continuous sides of the base, and the control circuit is arranged in a substantially L-shaped area along with the other continuous sides of the base.

17. The electronic endoscope as claimed in claim 9, further comprises an imaging optical system for forming an image of the observation part on the light receiving surface of the imaging sensor, and an opening portion provided in the tip portion of the main body for receiving the imaging optical system and the imaging element, in which the imaging optical system and the imaging element are disposed within the opening portion so that the optical axis of the imaging optical system passes through the center of the base of the imaging element.